

falcata they are thin and hooked at the extremity, and in *P. crispata* they are thin and nearly cylindrical; but they always keep their incurved form, and their extremity is always placed obliquely, that is, with their anterior portion nearer the centre of the shell.

To each of these processes there is attached a muscle, which was pointed out to me by my friend, Mr. James Sowerby, and which arises from the foot of the animal; I agree with him in thinking it must greatly assist them in boring, as by withdrawing the centre of the expanded disk of the foot, the animal, by the pressure of the atmosphere, will be strongly attached to the rock, and thus be furnished with a fulcrum to rasp away the surrounding medium, by means of a semirotatory motion, which would be produced by the alternate action of these muscles.

From the want of specimens preserved in spirits, I have not been able to determine accurately the precise direction and point of origin of this muscle; nor have I had an opportunity of examining the animals in their natural habitations. The above conclusion is greatly supported, first by the peculiar form of the end of the foot, of all the species of this family, which alone appears to bore by means of rasping; and secondly by the oblique position of the end of the falciform process to the back of which the muscle is attached.

ART. LI. *Descriptions of some rare, interesting, or hitherto uncharacterized subjects of Zoology; by N. A. VIGORS, jun. Esq. M. A. F. L. S. With Figures by JAMES DE CARLE SOWERBY, Esq. F. L. S.*

THE number of subjects in every class of zoology which have hitherto remained undescribed in our cabinets has long been a reproach to this country; and any attempt to remove it by characterizing a portion, however limited, of our hidden treasures, needs no apology or preamble. It is my intention to give descriptions

through the medium of this journal, as far as its limits will permit, of such animals as may be unknown to the scientific world in general, adding occasionally the details of some others, which though already elsewhere described, may have a peculiar interest to the naturalists of this country. Written descriptions in general convey but an inadequate idea of the productions of nature; but when they are accompanied by such superiour figures, as will be supplied by one of the most eminent artists of our days, I feel a confidence that the present attempt will be satisfactory to the lovers of science. The descriptions will follow each other as the subjects occur, without any views of systematic disposition.

Subregnum. VERTEBRATA. Auct.

Classis. AVES. Auct.

Ordo. INSESSORES. Mihi.

Tribus. DENTIROSTRES. Cuv.

Fam. MUSCICAPIDÆ. Mihi.

Genus. MUSCICAPA. Linn.

LATHAMI. *M. atra*, pectore abdomineque purpureo-rubris, fronte crissoque albis.

Tab. 13.

Habitat in Novâ Hollandiâ.

In Mus. nost.

Long. corp. $4\frac{1}{4}$.*

This species is closely allied to *M. erythrogastra*, Lath., but may be at once distinguished from it by the total absence of white from the wing and tail feathers, from the deeper black of the head, back, and tail, and from the strong purplish red of the *abdomen*, which is bright scarlet in *M. erythrogastra*. There is a mutilated specimen in the collection of the Linnean Society, which as far as can be judged from its imperfect state, accords with my bird, with the exception of the outer tail feathers being internally margined with white. Dr. Latham in his description of *M. erythrogastra* particularizes a variety which appears also to approach the bird before us. But, although the former species seems to vary considerably, I cannot conceive that so total an

* My measurement throughout is in inches and their component parts.





alteration could take place in its colour as to identify it with the present species. There is a character also, which belongs to some of the Australasian *Muscicapidæ*, that of the shafts of the tail feathers being prolonged, so as either to stand naked beyond the webs, or to form an angle with them, making the *apex* of the feather pointed, instead of round as in general; and which though discernible in both the species before us, is much more considerably developed in *M. Lathamii* than in *M. erythrogastra*. The length moreover of all the specimens of the latter species, which have come under my inspection, exceeds that of the former, by nearly half an inch. I have named the species in honour of the venerable authour of the "General Synopsis of Birds," the Father of Ornithology in this country.

The extensive group of birds that forms the genus *Muscicapa* of Linnæus exhibits several varieties of structure that have long since required to be separated and characterized. I am happy to have it in my power to add that the subject has been taken up, in conjunction with that of several neighbouring groups, by my friend Mr. Swainson, by whom the scientific world may expect to have it handled with ample justice. I consequently refrain from making any observations on the natural affinities of the bird before us and its congeners of New Holland, but shall refer it provisionally for the present to the overgrown genus *Muscicapa*.

Fam. SYLVIADÆ. Mihi.

Genus. ANTHUS. Bechst.

RICHARDI. Vieill. *A. olivaceo-fuscus, albido nigroque varius, subtus albidus, pectore rufescente maculis nigris, rectricibus duobus externis albo-marginatis; pedibus hallucisque ungue longissimis.*

Tab. 14.

Habitat in Angliâ.

In Mus. nost.

Long. corp. 6 $\frac{7}{10}$.

Anthus Richardi. Vieillot. Dict. d'Hist. Nat. Art. *Pipi*.

————— Temm. Pl. Col. 101.

Although the above species has been recently described by M. Vieillot, and admirably figured in the "Planches Coloriées," I am

induced to have it represented in the present number of this journal, as it forms an interesting addition to the Ornithology of the British Islands. The specimen, from which the accompanying figure has been taken, was captured alive some time since in the neighbourhood of London, and is now in my collection. It is a young bird and nearly in the same state of plumage as the bird figured by M. Temminck; the adult bird is distinguished by the greater strength of the colouring in general, and more particularly of that of the spots on the breast. The species is at present included in the genus *Anthus*; but the intelligent observer will at once detect a striking deviation from the type of that group, in the length of the legs and the hinder claw. In the former character the bird seems to correspond with the *Megalurus* of Dr. Horsfield, in the latter to approach the true *Alauda* of Authours. I have laid a more detailed account of this recent addition to the British *Fauna* before the Linnean Society, to which I must refer the reader for further particulars, and a more enlarged description.

Tribus. SCANSORES. Auct.

Fam. PSITTACIDÆ. Leach.

Genus. PSITTACULA. Kuhl.

KUHLII. *P. flavo-viridis, gutture, genis, pectore, abdomineque coccineis, cristâ occipitali, fasciâque abdominali purpureis, rostro pedibusque rubris.*

Tab. 16.

Capitis vertex nitidè viridis. *Irides* aureo-rubri. *Rectrices* coccinei, purpureo-marginati, apice viridi. *Crissum* viride.

Long. corp. circiter $6\frac{3}{4}$.

Habitat in Ins. Toohooteteroohæ Maris Pacifici.

In Mus. Dom. Cross.

We are indebted for the representation of this new and beautiful Parroquet, to the liberality of Mr. Cross of the Exeter Change Museum, who lately received several specimens of it from the island above named, situated a day's sail from Otaheite. The bird from which I took my description being alive and very wild, I have not been able to enter into its characters as far as I should wish. I have named it after the late M. Kuhl, who has left us a



